

Title (en)
Low external field inductor

Title (de)
Induktivität mit geringem externem Feld

Title (fr)
Inductance à champ externe réduit

Publication
EP 1313114 A2 20030521 (EN)

Application
EP 02025498 A 20021115

Priority
US 99934601 A 20011115

Abstract (en)
An inductor is wound axially around a cylindrical center structure, such as a core or form, so that each turn includes portions extending axially along a circumferential outer surface of the center structure and portions extending across the end surfaces of the center structure. Adjacent axial portions, which are preferably but not necessarily consecutive turns, carry current in the same direction to the extent possible. External magnetic fields therefore fall off rapidly and at least partially offset so that the inductor can handle high currents such as those relating to filtered electric power transmitted into a borehole for powering artificial lift equipment. <IMAGE>

IPC 1-7
H01F 37/00; H01F 27/36; H01F 41/06

IPC 8 full level
H01F 37/00 (2006.01); **H01F 27/36** (2006.01)

CPC (source: EP US)
H01F 37/00 (2013.01 - EP US); **H01F 27/36** (2013.01 - EP US); **Y10T 29/49071** (2015.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
EP 1313114 A2 20030521; EP 1313114 A3 20041201; CA 2412083 A1 20030515; US 2003090357 A1 20030515; US 6781501 B2 20040824

DOCDB simple family (application)
EP 02025498 A 20021115; CA 2412083 A 20021115; US 99934601 A 20011115